



# Science and Technology Data - 2011

## Government

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*Science and Technology Data* is published yearly by Industry Canada's Science and Innovation Sector. This publication presents a snapshot of the state of science and technology in Canada in an accessible and convenient format.

This year, the format has been changed to five two-page documents. "National" provides a summary of Canada's R&D. "Government," "Industry" and "Higher Education" each cover a specific component in the national S&T system. "Canada & the World" describes links between Canada's S&T activities and those in other countries around the world.

Due to the varied approaches to national collection and multilateral compilation of data, the figures used for international comparisons will often be for earlier periods than those used for domestic trends. All figures are based on the most recent, reliable data.

The Government of Canada is the second most important funder of R&D in Canada behind the business sector. In recent years, the largest share of the federal government's expenditures on R&D was allocated to the higher education sector.

In addition to R&D, the federal government also supports RSAs. In 2012, RSAs accounted for 36 percent of the Government of Canada's total expenditures on S&T. Among its departments and agencies, the CIHR is the largest spender on R&D, while STC leads for RSA expenditures.

Figures on S&T personnel can be an indicator of intramural activity. In 2011, STC accounted for the largest share of the total federal government's RSA personnel. Meanwhile, the NRC accounted for the largest share of the federal government's R&D personnel.

Federal S&T spending supports a variety of socio-economic objectives. Public health, social structures and non-oriented research are the three objectives attracting the most funding. Overall, about half of the federal government's S&T spending is allocated to activities performed outside of the federal government (i.e., extramural).

### Acronyms and Abbreviations

CIHR	Canadian Institutes of Health Research
GDP	Gross domestic product
GERD	Gross domestic expenditure on research and development
GOVERD	Government intramural expenditure on research and development
IP	Intellectual property
NRC	National Research Council Canada
OECD	Organisation for Economic Co-operation and Development
STC	Statistics Canada

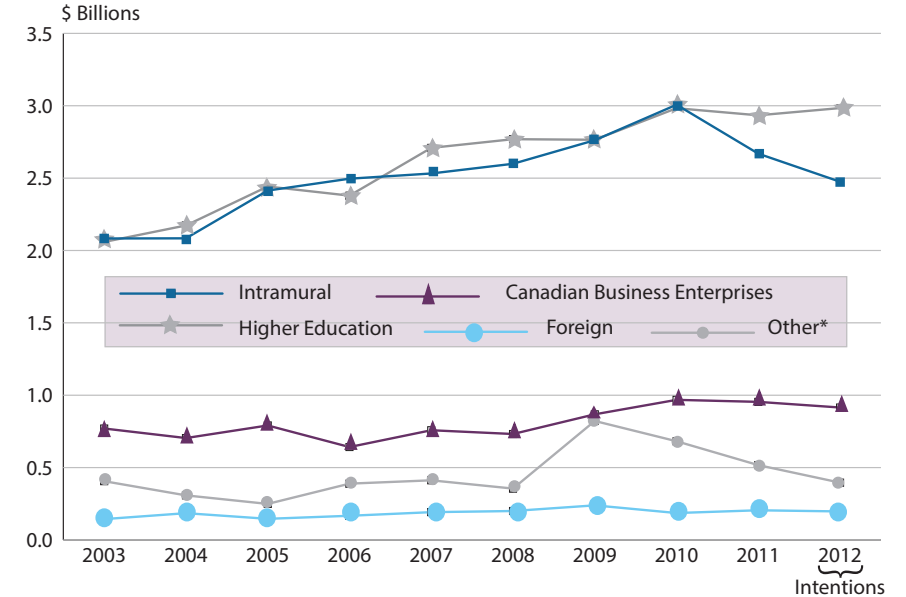
### Definitions

**R&D** "Research and development" is creative work undertaken on a systematic basis to increase the stock of knowledge, including knowledge of humankind, culture and society, and the use of this stock of knowledge to devise new applications.

**RSAs** "Related scientific activities" complement and extend R&D by contributing to the generation, dissemination and application of scientific and technological knowledge.

**S&T** "Science and technology" includes both R&D and RSAs.

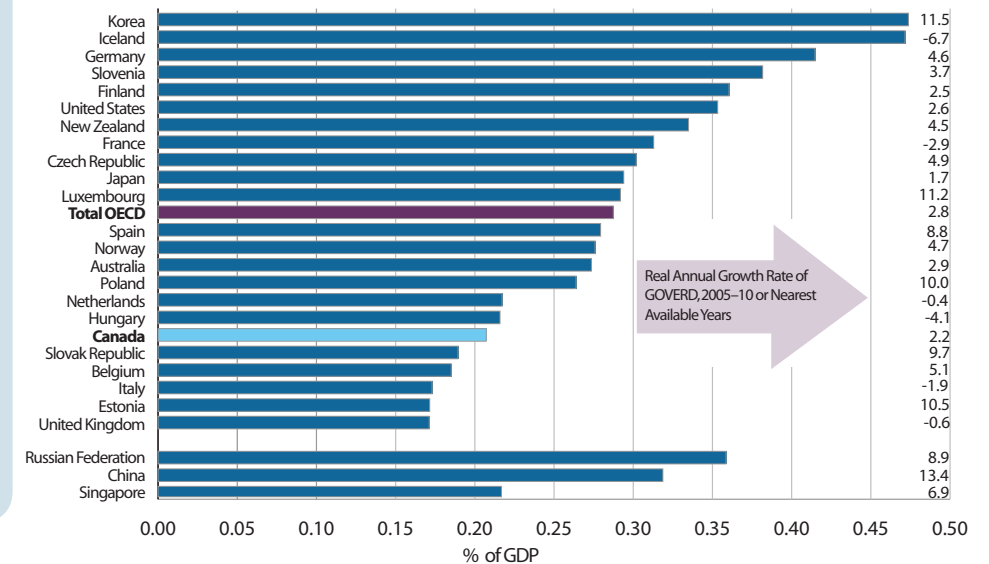
Federal R&D Spending by Performer Type, 2003 to 2012



\*Other includes private not-for-profit organizations, provincial and municipal governments, and other Canadian performers.

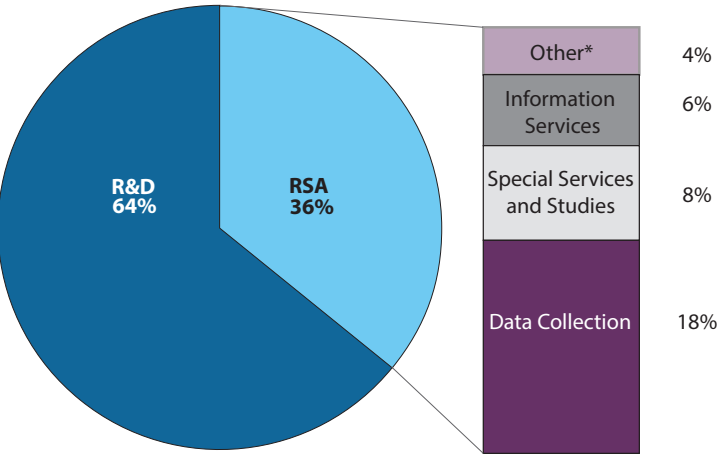
Source: Statistics Canada, *Federal Scientific Activities 2012/2013*, Catalogue no. 88-204-X, September 2012.

GOVERD as a Percentage of GDP, Top OECD Countries and Selected Non-OECD Countries, 2010



Note: Government expenditures include those by federal, provincial and local governments.  
Source: OECD, *Main Science and Technology Indicators: 2012/2*, January 2013.

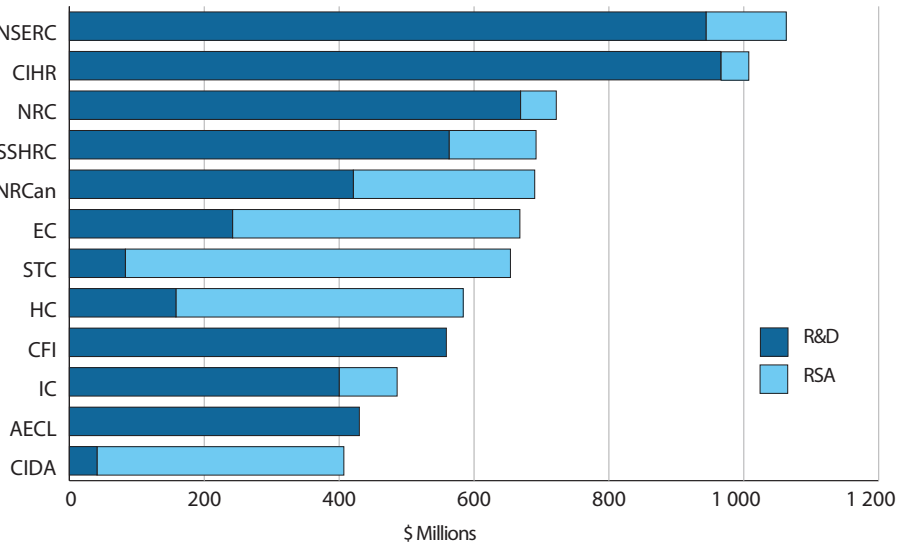
Federal S&T Spending by Activity, 2012 Intentions



Total Intended Spending: \$10.9 Billion

\*Other includes education support, administration of extramural programs and capital expenditures.  
Source: Statistics Canada, *Federal Scientific Activities 2012/2013*, Catalogue no. 88-204-X, September 2012.

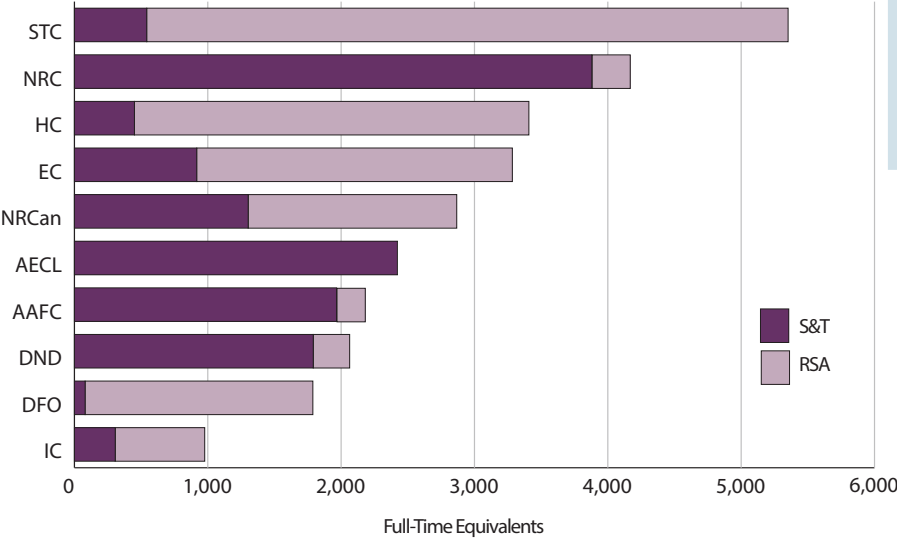
Major Federal S&T Departments and Agencies by Amount of Spending, 2012 Intentions



Source: Statistics Canada, *Federal Scientific Activities 2012/2013*, Catalogue n° 88-204-X, September 2012.

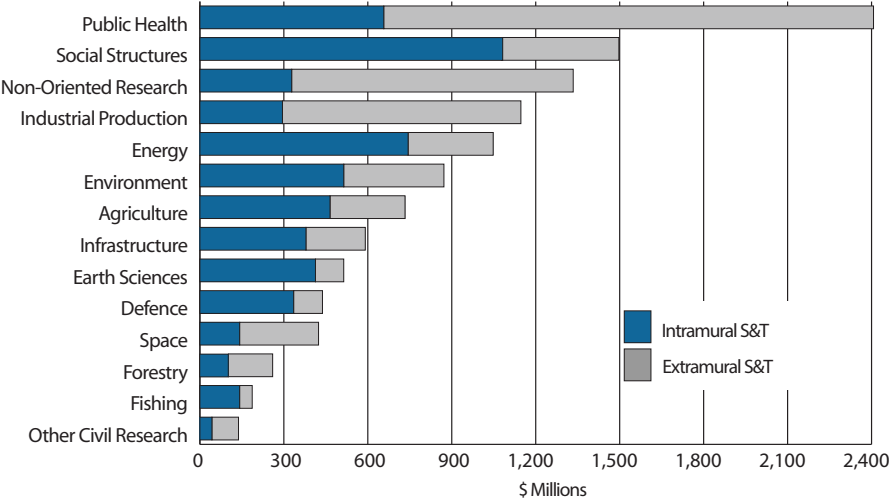
- AAFC Agriculture and Agri-Food Canada
- AECL Atomic Energy of Canada Limited
- CFI Canada Foundation for Innovation
- CIDA Canadian International Development Agency
- CIHR Canadian Institutes of Health Research
- DFO Fisheries and Oceans Canada

Federal Personnel Engaged in S&T, by Major Departments and Agencies, 2012



Source: Statistics Canada, *Federal Scientific Activities 2012/2013*, Catalogue no. 88-204-X, September 2012.

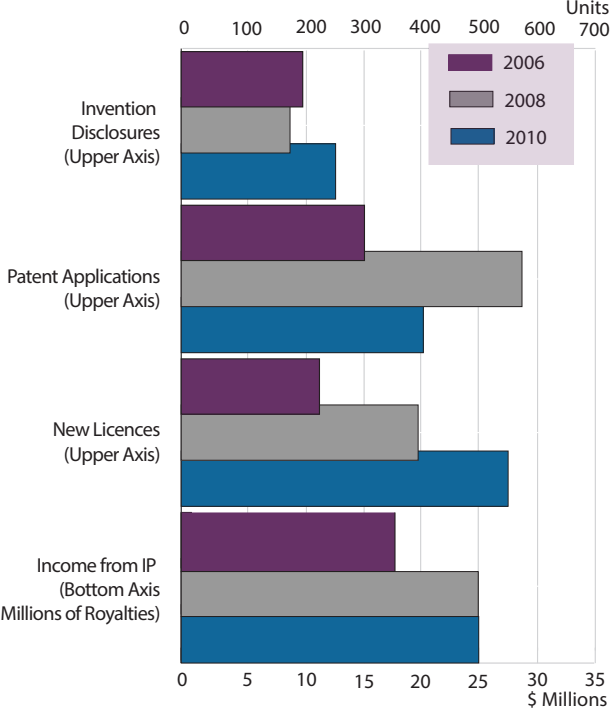
Federal S&T Spending by Socio-Economic Objective, 2010



Source: Statistics Canada, *Federal Scientific Activities 2012/2013*, Catalogue no. 88-204-X, September 2012.

- DND Department of National Defence
- EC Environment Canada
- HC Health Canada
- IC Industry Canada
- NRC National Research Council Canada
- NRCan Natural Resources Canada
- NSERC Natural Sciences and Engineering Research Council of Canada
- SSHRC Social Sciences and Humanities Research Council of Canada
- STC Statistics Canada

Federal Government Licensing and IP Income, 2006, 2008 and 2010



Source: Statistics Canada, *Intellectual Property Management, by Federal Departments and Agencies Indicators*, CANSIM Table 358-0026.